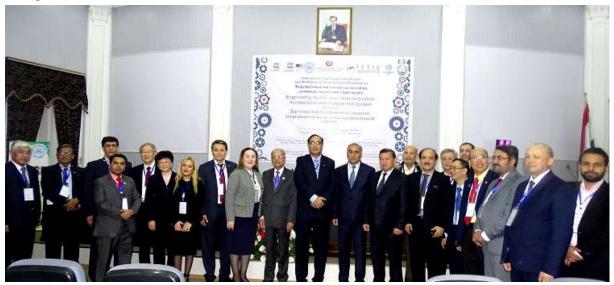
International High Level Policy Forum and Workshop on "Developing the Roadmap on Engineering Qualification Standardization, Accreditation and Professional System in Dushanbe

Economic Cooperation Organization Science Foundation (ECOSF) and UNESCO in partnership with the Academy of Sciences, Republic of Tajikistan, the Federation of Engineering Institutions of Asia and the Pacific (FEIAP), the International Science, Technology & Innovation Centre (ISTIC) and Pakistan Engineering Council (PEC) organized an International High Level Policy Forum and Workshop on "Developing the Roadmap on Engineering Qualification Standardization, Accreditation and Professional System (EQSAPS)" in Dushanbe, Tajikistan from 27 to 29 March 2017. This roadmap is aimed at extension and adaptation of the FEIAP guidelines on engineering qualification standardization to countries of ECO region with focus on Central Asia region. Purpose of the workshop was also to assess and review the existing engineering curricula offered in Tajikistan with the objective of harmonization and standardization of curricula within the country with the FEIAP engineering qualification guidelines.



The workshop brought together key stakeholders, policy makers, academicians and engineers from diverse fields and backgrounds that included representatives of high level Government from Republic of Tajikistan, participants from Universities, Engineering Schools and Industry, regulatory bodies of higher education, Academies of Sciences and Engineering Institutions, and some key persons from Azerbaijan, Iran, Kazakhstan, Kyrgyzstan, Pakistan, and Uzbekistan participated in the Forum. The mentors and facilitators from UNESCO Regional Science Bureau Jakarta & Islamabad, FEIAP Malaysia, Indonesia, Myanmar and China, PEC, ISTIC Malaysia, IEEE and ECOSF facilitated and/or contributed to the conduct of EQSAPS. In all, 23 International and 16 local experts besides other government officials took part in EQSAPS that was spread to six sessions.

Read More: <a href="http://eco4science.org/EQSAPS-1">http://eco4science.org/EQSAPS-1</a>

Photo gallery of the event is available in the link: https://www.facebook.com/ECOScienceFoundation

## **Appldea2R Contest**

The last date for submission of Idea for Appldea2R has been extended till: **25th May 2017** 

More details can be viewed at: <a href="http://appidea2r.com/">http://appidea2r.com/</a>



Last date for submitting Ideas extended to:

MAY 25, 2017

# ECOSF Signs MoU with IRIS for collaboration in S&T Parks, Incubation Centers, Innovative and Entrepreneurial Initiatives in ECO Region

ECOSF and Isfahan Regional Center for Technology Business Incubators & Science Parks Development (IRIS) - under the auspices of UNESCO signed a Memorandum of Understanding (MoU) during the inaugural session of Training Workshop on Technology-Based Entrepreneurship for Developing Countries on May 25-, 2017 in Isfahan, Iran. Prof. Manzoor H. Soomro, President ECOSF and Dr. Mohammad Javad Omidi, Director IRIS signed the MoU on behalf of ECO Science Foundation and IRIS respectively; while Director ISTIC Dr. Sharifah Maimunah, Executive Director-Elect ECOSF Dr. Komail Tayyebi, SO ECOSF Engr. Khalil Raza and IRIS-ISTT International Cooperation head Ms. Mozhgan Yazdianpour witnessed the signing.



Under this MoU, ECOSF and IRIS will work together to further strengthen the mutual collaboration in development S&T Parks, Incubation Center and promotion of Innovative and Entrepreneurial Initiatives in ECO region. The MoU also provides a general framework to facilitate collaboration and cooperation between the ECOSF and IRIS to promote scientific and technology based entrepreneurship and economic development in the region. Under the MoU, IRIS will provide services in promoting science and technology parks and incubators initiatives. Both organizations will also collaborate in joint organization of events and programs such as conferences, training workshops, seminars, etc. in the ECO member countries.

Read More: <a href="http://eco4science.org/ECOSF-IRIS-MoU">http://eco4science.org/ECOSF-IRIS-MoU</a>

## IRIS-ISTT-ECOSF-ISTIC hold joint International Workshop on "Technology-Based Entrepreneurship for Developing Countries" in Isfahan-Iran

Isfahan Regional Center for Technology Incubators & Science Parks Development under the auspices of UNESCO (IRIS), Isfahan Science and Technology Town (ISTT), ECOSF and the International Science, Technology and Innovation Centre for South-South Cooperation under the Auspices of UNESCO (ISTIC) in Malaysia, joined together to hold an International Workshop on "Technology-Based Entrepreneurship for Developing Countries" with collaboration of International Association of Science Parks and some private agencies. The Workshop was inaugurated in Isfahan, Iran from 25 to 28 April, 2017.

The purpose of this workshop was to impart knowledge on how to commercialize scientific and research technological among participants from developing countries with a goal to innovate and develop patents. The workshop provided an opportunity to the participants to familiarize with the elements of entrepreneurship in relation to the development. The technological workshop also served as a platform to learn a practical approach on how to help successful build create and technology-driven businesses. The workshop attracted a number of participants from diverse background



from developing countries including Bangladesh, Iran, Iraq, Kazakhstan, Kyrgyzstan, Oman and Tajikistan. Experts from Iran, Italy and Malaysia were the trainers. From ECOSF Engr. Khalil Raza joined the workshop and also led one of the group of participants in developing business proposal. ECOSF sponsored the participation from ECO member countries other than the hosts- Iran.

Prof. Manzoor H. Soomro, in his keynote speech, thanked all the organizing partners including IRIS, ISTT, ISTIC and some local institutions for their sincere contribution towards making this workshop possible. Prof. Soomro introduced to participants the ECOSF and its flagship programs and aims & objectives for promotion of STI based economic development in the ECO region. He said that; in a short period of time, ECOSF has done quite well in establishing strategic partnerships with world's leading organizations and development of its flagship programs including, IBSE, Engineering Qualification Standardization as well as ICT promotion by engaging youth with a launch of AppIdea2R contest in the region.

Read More: http://eco4science.org/Technology-Based-Entrepreneurship-1



#### World Water Day 2017 with the theme "Why Wastewater"

Each year, World Water Day is celebrated with a specific aspect of water throughout the World. This year theme of the World Water day was 'Wastewater'. Wastewater is one of the major water challenges faced by the world including Pakistan, particularly near the urban areas. Presently, most of the wastewater is discharged untreated into drains, streams and rivers, which deteriorate the water quality. It is many times reported that untreated effluents from industries and sewerage reduces the Dissolved Oxygen (DO) level and increases Biological Oxygen Demand (BOD) and Total Dissolved Solids (TDS), besides containing toxic chemicals. Those toxic chemicals reach the humans through drinking water and food.



Pakistan Council of Research in Water Resources (PCRWR) and ECOSF along with other supporting partners (Metropolitan Corporation Islamabad, ICIMOD, Riphah International University, UNESCO Water Chair, IUCN and LEAD) organized one day conference on World Water Day on March 20, 2017. The event provided a platform for exchange of experiences and dialogue to address wastewater management.

On behalf of ECOSF, Engr. Mr. Khalil Raza, Scientific Officer, made a presentation on "Science Education for an Effective Wastewater Management". He presented a comparative analysis of wastewater treatment in Pakistan and OECD countries. Mr. Khalil emphasized the importance of science education and its applications to address one of the most complex global challenges, including water crisis. The 21st century challenges, such as climate change, water scarcity, energy and food security all are scientific in nature. If the general public is not equipped well enough to deal with scientific ideas and the underlying scientific principles, it will be nearly impossible to respond to these challenges, he added. Mr. Khalil also presented a transformative approach of turning wastewater into usable energy through a Fuel Cell technology.

Read More: http://eco4science.org/World-Water-Day-2017-1

### Kazakhstan elected as non-permanent member of the UN Security Council

One of the ECO Member state, Kazakhstan was elected as a non-permanent member of the United Nations Security Council (UNSC) for a two-year term beginning in January 2017. Thus, Kazakhstan has become the first Central Asian country to be elected to the world's most important political body that has the primary responsibility for maintaining global peace and security. Securing a UNSC Membership by the UN General Assembly's approval is due to Kazakhstan's positive reputation and growing role in international affairs. It is pertinent to mention that Kazakhstan diplomacy has identified four most important areas for global partnership that include nuclear security, energy security, food security, and water security. ECOSF is looking forward to extend its fullest cooperation with the Government of Kazakhstan in the areas of energy, food and water security.

#### ECOSF holds a Follow-up Meeting with MSRT Officials in Tehran

President, ECOSF Prof. Manzoor Hussain Soomro along with Executive Director-Elect Prof. Syed Komail Tayebi and Scientific Officer Engr. Khalil Raza held a follow-up meeting with the Focal Person for ECOSF in the Ministry of Science, Research & Technology (MSRT) of Iran, Dr. Attaaullah Koohian Deputy Director of the Center of International Scientific Cooperation in Tehran on April 24th, 2017. Mr. Ali Ghannadi, Expert MSRT and Prof. Alireza Sari of University of Tehran were also present in the meeting on behalf of MSRT.



Review of the progress and updates on various budgetary matters, scholarship grants were discussed amongst two organizations. During the meeting, it was informed that Dr. Syed Komail Tayebi will join as Executive Director, ECOSF once he receives clearance from Iranian Ministry of Foreign Affairs. MSRT budget contribution to ECOSF and grants approved by ECOSF for conferences in Tehran in 2016 have also been approved will be released soon.

Prof. Soomro appreciated the efforts taken by the MSRT and the Government of Iran for their support to ECOSF in various matters. He also acknowledged that Iran has a rich history of making significant contribution to Science and Technology on a global scale, especially during the Safavid empire. He assured his full support in scaling up the cooperation between Iran with other ECO member countries in the areas of Science and Technology.

Read More: <a href="http://eco4science.org/Meeting-with-MSRT">http://eco4science.org/Meeting-with-MSRT</a>

#### The Ambassador of Azerbaijan to Pakistan appreciates the efforts of ECOSF towards STI promotion in ECO region

H.E. Mr. Ali Alizada, the Ambassador of Azerbaijan to Pakistan appreciated the efforts of ECO Science Foundation being taken in the field of Science, Technology and Innovation leading to the economic development in the ECO region. The remarks were passed by him during the call on by the President ECOSF to the Ambassador at the Embassy of Azerbaijan in Islamabad on 19 April 2017.

During the call on, President ECOSF Prof. Manzoor H. Soomro welcomed H.E. Alizada for taking the responsibility as Ambassador to Pakistan and hoped that the relation between two countries will be stronger economically and socially. Further, President ECOSF briefed the Ambassador about the activities being carried out by the Foundation in the ECO region. He also mentioned that the Foundation is in close liaison with the Azerbaijan National



Academy of Sciences (ANAS) for promotion of scientific activities within Azerbaijan and in the region. He further said that ECOSF invites participation of experts/scientists/engineers from Azerbaijan in different scientific forums, seminars, meetings, workshops, etc and the response and contribution by Azerbaijan is very encouraging. The experts, scientists, engineers, etc also getting benefit from the Travel Grant Programme of ECOSF. Prof. Soomro shared that ECOSF also co-organized the 10th IEEE International Conference on Application of Information and Communication Technologies (AICT2016) in Baku in partnership with Qafqaz University in 2016.

President ECOSF apprised H.E. Mr. Alizada that the ratification of Charter and its Additional Protocol of the Foundation by Azerbaijan has not yet been completed and if it is completed, this will strengthen ECOSF to carry out/organize more scientific activities in Azerbaijan which will create the economic stability not only in Azerbaijan but in other member states too.

Read More: http://eco4science.org/Ambassador-of-Azerbaijan

## President ECOSF calls upon the new Ambassador of Kyrgyz Republic and apprised him about the activities of ECOSF for promotion of STI in ECO region

President ECOSF Prof. Dr. Manzoor H. Soomro called upon the new Ambassador of Kyrgyz Republic to Pakistan H.E. Mr. Erik BEISHEMBIEV at Kyrgyz Embassy in Islamabad on 20 April 2017.

President ECOSF briefed the Ambassador about aims and objectives of the Foundation and apprised him about ongoing programmes and some glimpses of scientific activities done by the Foundation in the region. He further said that ECOSF has been inviting experts/scientists/engineers from Kyrgyzstan in various scientific forums, seminars, meetings, conferences and capacity building workshops, fully funded by the Foundation and its partners. The participation of scientists from Kyrgyzstanis encouraging. He further mentioned that the travel grant support has also been provided to the Kyrgyz scientific community for the participation in the scientific forums/workshops in other ECO countries and international forums.



Prof. Soomro informed the Ambassador that ECOSF has been endeavoring for initiating/collaborating scientific activities in Kyrgyzstan but some impediments are faced. The one major impediment is the non ratification of ECOSF Charter and its Additional Protocol by Kyrgyzstan. He requested Ambassador for early completion of the process of the ratification of the Charter and its Additional Protocol by Kyrgyzstan so that ECOSF can contribute scientifically for the promotion STI in Kyrgyzstan with more vigour.

Read More: <a href="http://eco4science.org/Ambassador-of-Kyrgyz-Republic">http://eco4science.org/Ambassador-of-Kyrgyz-Republic</a>

#### **President ECOSF meets Mayor of Isfahan Iran**

Mayor of Isfahan City in Iran, Dr. Mehdi Jamalinejad invited the President ECOSF Prof. Dr. Manzoor Soomro to meet in his office in Isfahan on April 28th, 2017. The meeting was held to discuss the means of cooperation and promotion of science, technology and innovation (STI) and science at schools in Isfahan. Dr. Jamalinejad and his advisor Dr. Mohammadreza Nilfaroushan warmly welcomed and appreciated the opportunity to meet with Prof. Soomro and his team. Ms. Mozhghan Yazdianpour, Director Isfahan Science and Technology Town (ISTT) and Engr. Khalil Raza, Scientific Officer ECOSF also attended the meeting.

Dr. Mahdi Jamalinejad explained that Isfahan city has a rich and long history of over four hundred years of culture, tradition and innovation in culture, education, science and technology. He further added that there over 200 types of handicrafts and many of them have received global recognition. Isfahan is also considered to be the creative city of the world.

Dr. Soomro, thanked Dr. Jamalinejad for his invitation to the meeting and informed him that ECOSF had held an Inquiry Based Science Education (IBSE) Workshop in Isfahan in collaboration with Ministry of Science, Research and Technology, Ministry of Education and Ministry of Foreign Affairs of Iran in January 2017. Dr. Soomro also informed the Mayor that the Executive

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Director of ECOSF, Dr. Syed Komail Tayebi hails from Isfahan that gives us an edge and the opportunity to be more integrated with this city. Dr. Jamalinehad was also introduced to various flagship programs of ECOSF including IBSE for STEM education and Engineering Qualification Standardization & Accreditation. Dr. **ECOSF** Jamalinejad offered establish a resource center in Isfahan and the City Government would extend their all out support to promote S&T and to be a leader in the region. In the end, Dr. Soomro extended invitation to Dr. Jamalinejad to visit Islamabad.



Read More: <a href="http://eco4science.org/Mayor-of-Isfahan">http://eco4science.org/Mayor-of-Isfahan</a>

#### ECOSF and FCC Lahore organized 1st International Training Workshop on Probiotics

1<sup>st</sup> International Training Workshop on Probiotics: Research to Production was organized by ECOSF and the Forman Christian College – A Chartered University (FCC), Lahore from 27-29 March, 2017 at FCC, Lahore. The workshop focused on the theoretical and practical aspects of safe and regulated use of probiotic in human and animal health. Main objectives of this training workshop were to upgrade the skills of researchers and industrial persons who assist the country to increase consumption of probiotic products; increasing awareness of the participants about probiotics and prebiotics Ozone layer depletion & its beneficial and harmful effects; introducing and demonstrating the procedures of mechanism probiotics and prebiotics; stimulating the development of a network for information sharing throughout the sector; helping the country to achieve the sustainable development goals by creating the new products that can reduce the rate of diarrhea, etc.

There were eight resource persons/trainers of the workshop; from them four were invited from Iran. The workshop was attended by 30 young researchers in probiotics field.



#### ECOSF Delegation visits University of Tehran Meets the Vice President of the University on 24 April 2017

A delegation of ECOSF led by the President Prof. Manzoor H. Soomro along with Executive Director-Elect, Prof. Syed Komail Tayebi and the Scientific Officer Engr. Khalil Raza, visited University of Tehran on April 24th, 2017. They held a meeting with Prof. Dr. Mohammad Bagher Gharamani, the Vice President of International Affairs of the University, Mr. Abdolmajid Eskandari, Director General (International Students) and Prof. Alireza Sari, of the Marine Biology Department. They discussed the possible means and ways to strengthen the existing cooperation between ECOSF and the University of Tehran.

During the meeting, Prof. Soomro briefed the hosts about the strategic role of ECOSF and its contribution towards development in the ECO region. He also shared various programs being undertaken by ECOSF for promotion of science and technology, including the initiatives; such as Appldea2R, Engineering Qualification Standardization and Inquiry Based Science Education and establishment of the ECOSF's S&T Fund. Prof. Soomro desired that the University students may be encouraged to participate in ECOSF activities.

Prof. Ghahramani, in his remark urged that ECO member countries should work together very much like European Union and increase the student mobility to harness

the rich potential of the region. He was of the view that there is a need to create a strong networking among the ECO member states that would create a force to share ideas on Science and Technology that would in-turn make a significant difference in the long run.

Both sides emphasized on to promote further the bilateral cooperation in various areas. In the end, Dr. Ghahramani presented a gift of the Book on "5000 Years of Iranian Engineering" to Prof. Soomro, which was much appreciated by President ECOSF.

Read more: http://eco4science.org/University-of-Tehran

#### President ECOSF with his team meets the Acting Chancellor of Payame Noor University of Iran in Tehran

President ECOSF, Prof. Manzoor Hussain Soomro along with his colleagues; Executive Director-Elect Dr. Syed Komail Tayebi and Scientific Officer Engr. Khalil Raza visited the Payame Noor University (PNU), Tehran on April 24th, 2017. He held meetings with the Acting Chancellor Prof. A. Akbari. Professor Akbari briefed the visitors on various aspects of PNU. He informed that PNU is the only distance education institution in Iran and it is considered largest state university in Iran with over 0.6 million students. It is ranked sixth among the world's open universities and the second in Asia in terms of student population.

Dr. Soomro discussed in detail the possible means and ways to strengthen cooperation between ECOSF and PNU. It was agreed that an international conference on "Asia and the Pacific Economic Forum (APEF)" will jointly be held in Iran preferably in 2018 or in the last quarter of 2017.



Read More; <a href="http://eco4science.org/Payame-Noor-University">http://eco4science.org/Payame-Noor-University</a>

#### 6th Annual "Invention to Innovation" Summit held in Lahore ECOSF among the main supporters

The 6th Annual Invention to Innovation Summit was held at the University of Punjab in Lahore on March 8-9, 2017. On behalf of ECOSF, Mr. Khalil Raza, Scientific Officer and Mr. Ghulam Abbas, Assistant Director (Programs) participated in the summit and made their presentations during their respective thematic sessions. It is pertinent to mention and a pride for ECOSF that its President Professor Manzoor H. Soomro is among the three founders of the Innovation Summit in 2012 when he was Chairman of PSF.

The summit was organized by University of Punjab and University of Management Technology in collaboration with Institute of Research Promotion (IRP) and Pakistan Science Foundation (PSF) along with many other partners including the ECO Science Foundation. The Summit attracted a large number of participants that included policy makers, academicians, business community,

industry, students and civil society representative etc. The summit provided an opportunity for students to showcase their research work and innovative products and as well as a platform to strengthen academia-industry linkages. The summit included various thematic sessions, exhibitions & poster contest, lectures and presentations etc.

Read More: http://eco4science.org/6th-Invention-to-Innovation-1

#### President ECOSF visits TuWaS!- German brand of IBSE supported by the Industry

While in Bonn- Germany during the 5th Plenary Session of IPBES, President ECOSF Dr. Manzoor Soomro took the opportunity to visit the German design of Inquiry Based Science Education (IBSE) programme called TuWaS! (Technik und NaturwissenschaftenanSchulen, Technology and Science in Schools) in Cologne on March 8, 2017. The programme is led by Professor Petra Skiebe-Corrette of Freie University Berlin and fully funded by Industry in Bonn-Koln region. The major contributors are the Chamber of Commerce and Industry (CCI) Koln/Cologne and the member industries, particularly the chemical industry giant, INEOS that support the TuWaS!. TuWaS was founded in 2007 as cooperation between the Freie University Berlin and the Berlin Brandenburg Academy of Sciences and Humanities as a result of the success of the Pollen project. Pollen was a European research and development project supported by the European Commission (6th Framework Program), aiming to stimulate and support science teaching and learning in primary schools in 12 European cities. TuWaS is based on five pillars: (1) professional development of teachers, (2) providing teaching material, which is (3) curriculum based, (4) the





involvement of the community and (5) assessment. In the five years up to 2012, TuWaS! has trained over 1000 teachers and serves over 170 primary schools in four different German states. TuWaS! follows the model and material developed by the Smithsonian Science Education Center, Washington D.C.USA. The teachers are pre trained by Master Trainers at the CCI. The CCI pays for coordinator, material, transportation, teachers' trainings and training place. The teachers and trainers do it voluntarily; however, the schools allow their time to spend in trainings.

Read More: <a href="http://eco4science.org/TuWaS">http://eco4science.org/TuWaS</a>

## International Conference on Innovations in Electrical Engineering and Computational Technologies (ICIEECT) held at Karachi-Pakistan

International Conference on Innovations in Electrical Engineering and Computational Technologies (ICIEECT-2017) was held at the Prof. Salimuzzaman Siddiqui Auditorium of International Center for Chemical and Biological Sciences, LEJ National Science Information Center, Karachi from 5-7 April, 2017. The ICIEECT was organized by Faculty of Engineering, Science and Technology, Indus University Karachi under the technical sponsorship by Institute of Electrical and Electronics Engineers (IEEE) Karachi Section and Patronage of Higher Education Commission (HEC), Islamabad. The conference featured invited talks from eminent personalities all around the world, pre-conference tutorial/workshops, poster presentations and referred and peer reviewed paper presentations. The conference scope covered: Power, Energy and Power Electronics; communication, Networking and Broadcast Technologies; computing and Processing; Components, Circuits, Devices and Systems; signal Processing and Analysis.

Chairman of Pakistan Engineering Council (PEC) Engr. Jawed Saleem Qureshi was the Chief Guest, while President of ECOSF Prof. Dr. Manzoor Hussain Soomro was the Guest of Honour. Engineer Qureshi welcomed the international participants and speakers and congratulated all stakeholders for organizing the event. He also shared with participants the reforms that he had initiated in PEC particularly for the young engineers. In his speech, Dr. encouraged all researcher engineers to link uр with their counterparts in other ECO member countries and assured that ECOSF will be pleased to support such collaborations.



Read More: <a href="http://eco4science.org/ICIEECT">http://eco4science.org/ICIEECT</a>

## UNESCO led International Workshop on Strategic Data for Reliable Models and Timely Flood Forecasts, 10 – 11 April 2017

United Nations Educational, Scientific and Cultural Organization (UNESCO) in partnership with the Government of Japan through Japan International Cooperation Agency (JICA) is extending financial and technical support to the Government of Pakistan to address flood related challenges. The project is being implemented in Pakistan by Pakistan Meteorological Department (PMD), Pakistan Council of Research in Water Resources (PCRWR), National University of Sciences and Technology (NUST) and University of Engineering and Technology (UET). In this regard, an International Workshop on "Strategic Data for Reliable Models and Timely Flood Forecasts" was launched on April 10<sup>th</sup>, 2017 in Islamabad. The workshop attracted participation of a number of irrigation experts and flood management professionals from government and private sector, development organization, provincial irrigation departments and academia. Engr. Khalil Raza, Scientific Officer participated in the inaugural session of the workshop on behalf of the ECO Science Foundation.

The primary purpose of holding this workshop was to share the best practices in data acquisition approaches and techniques towards modelling the reliable flood forecast in the Indus basin with an objective to safely manage and control flood using effective flood forecasting mechanism. The workshop is aimed at capacity development of managers of the Indus Basin and that will enable them to hydrological models for flood management and decision support tools for mitigation and relief activities.

Read More: <a href="http://eco4science.org/Flood-Forecasts">http://eco4science.org/Flood-Forecasts</a>



#### **President ECO Science Foundation visits Sukkur IBA Community Colleges**



President ECOSF Prof. Manzoor Hussain Soomro, visited Sukkur IBA and held meeting with the Director/Rector Prof. Nisar Siddiqui and reviewed the implementation of Inquiry Based Science Education (IBSE) in community colleges of Sukkur IBA. Earlier on 8 April, Prof. Soomro also visited their community college Naushahro Feroz and interacted with Principal, teachers & students practicing implementing IBSE. It is pertinent to mention that Sukkur IBA has 7 Community Colleges in Sindh and with the technical support of ECOSF, are enthusiastically practicing IBSE for teaching STEM subjects. Their students have also been winning national and international awards and prizes for their innovative projects.

Read More: <a href="http://eco4science.org/IBA-Community-Colleges">http://eco4science.org/IBA-Community-Colleges</a>

## International Workshop on Water Sanitation and Resource Recovery Solutions for Sustainable Development, NUST Islamabad, April 6-7 2017

Engr. Khalil Raza, Scientific Officer, ECOSF participated in the two-day workshop organized by The Institute of Environmental Sciences & Engineering (IESE) on "International Workshop on Water Sanitation and Resource Recovery Solutions for Sustainable Development" held at the National University of Sciences & Technology (NUST), Islamabad from April 6<sup>th</sup> – 7<sup>th</sup> 2017. The workshop brought together experts, researchers and professionals from various sectors including government, development sector and academia. The speakers and presenters shared their research outcomes, experiences and as well as discussed the most significant developments and challenges in the area of water, sanitation and wastewater treatment

technologies.

The workshop also provided an opportunity to students, researchers and development professionals to discuss ideas and solutions to achieve Sustainable Development Goals (SDG) 6.1 (universal access to safe drinking water) and 6.2 (access to adequate and equitable sanitation and hygiene). The workshop included presentations by well-known international researchers and speakers and as well as local speakers that discussed key challenges and issues of Water, Sanitation and Wastewater treatment in developing and emerging economies.



Read More: http://eco4science.org/Water-Sanitation-and-Resource-Recovery

## Cooperation between ECOSF and Turkic Council Discussed

President ECOSF briefly interacted with Turkic Council to enhance cooperation and collaboration between the two organizations in Istanbul on 20th March, 2017. Project Director Mehmet Sefik Yurtçiçek from Turkic Council and Prof. Soomro discussed collaboration on mutual interests with the background that some of the member states of both organizations are the same and ECOSF has MoU with TWESCO (www.twesco.org) which is an affiliated organization of Turkic Council.

The brief meeting that took place at Istanbul International Airport, Prof. Soomro introduced ECOSF, its aims and objectives and the on-going activities such as the promotion and funding S&T research collaboration



and capacity building in Science, Engineering, Technology and Innovation (SETI). He also shared the programme of Inquiry Based Science Education (IBSE) capacity building of School Teachers for teaching STEM subjects. President ECOSF affirmed that both the organizations can collaborate to pursue common goals in ECO member states leading to socio economic development of the member states. Mr. Yurtçiçek assured Prof. Soomro that he will discuss with the higher authorities of Turkic Council for cooperation with ECOSF and feedback accordingly.

#### Panel Discussion on "Why Waste Water, Rethinking Water Resource Management in Pakistan"

Mr. Khalil Raza, Scientific Officer, ECOSF participated in a panel discussion that was arranged by the Sustainable Development Policy Institute (SDPI), World Wildlife Fund for Nature (WWF) and Nestle Pakistan on "Rethinking Resource Management Pakistan" on March 28th, 2017 in Islamabad. The event brought together key stakeholders of water sector i.e. policy makers, civil servants, municipal administration, farmers and academia to discuss ways and means for effective management of wastewater in Pakistan.

The panelists included Mr. Waqar Ahmad, Head of Corporate Affairs,



Nestle' Pakistan, Mr. Rab Nawaz, Senior Programs Director, WWF Mr. Peter Zenger who also teaches Distribution Management and Politics of Water at Quid-e-Azam University, Dr. Muhammad Ashraf, Chairman Pakistan Council for Research in Water Resources, and Dr. Abid Suleri, Executive Director SDPI.

Read More:http://eco4science.org/Water-Resource-Management

## Inaugural Ceremony of ONE-Health Research Fellowships in Pakistan held in Islamabad

Pakistan Academy of Sciences and U.S. Academy of Sciences, Engineering and Medicine jointly organized an Inaugural Ceremony of ONE-Health Research Fellowship Program on March 30th 2017. U.S National Academy of Sciences is undertaking a fellowship program to build capacity of early to midcareer scientists from Pakistan in One Health (1-H) and foster collaboration and cooperation in preparedness and response to zoonotic diseases and other shared environmental health risks. Mr. Khalil Raza, Scientific Officer attended the ceremony on behalf of the ECOSF.

The One Health concept recognizes that the health of humans is interlinked to the health of animals and the environment. This is a 2-year fellowship program that gives an opportunity for five young Pakistani scientists to get training and mentoring for carrying out research in areas pertinent to Pakistan. The event was well attended by eminent scientists, researchers, academicians and experts from various backgrounds of medicine and health sciences.



Read More:http://eco4science.org/ONE-Health

#### Climate Compatible Development in Pakistan - National workshop on Forging Partnerships

A national workshop on 'Forging Partnerships for Climate Compatible Development in Pakistan" was organized by LEAD Pakistan in collaboration with Climate & Development Knowledge Network (CDKN) on March 21st, 2017. The event brought together key stakeholders to establish a coordination mechanism for implementation of National Climate Change Policy in the country. The workshop marked the conclusion of Climate & Development Knowledge Network (CDKN) program in Pakistan, managed by LEAD Pakistan for the past seven years. On behalf of ECOSF, Engr. Mr. Khalil Raza, Scientific Officer, participated in the workshop.



The event featured thematic sessions on key climate action areas, such as climate risk management, climate finance readiness and disaster risk management. Federal Minister for Climate Change, H.E. Mr. Zahid Hamid was the Chief Guest of the event. Mr. Zahid Hamid said that Pakistan is among the ten countries, heavily affected by and most vulnerable to climate change disasters. On behalf of ECOSF, Engr. Mr. Khalil Raza, Scientific Officer, participated in the workshop.

Read More:http://eco4science.org/Climate-Compatible-Development

#### **UNDP launched Mountain Protected Areas Project with Pakistani Stakeholders**

United Nations Development Program (UNDP) in partnership and collaboration with Italian Agency for International Development, Ministry of Climate Change and Government of Gilgit-Baltistan (GB) launched a joint project to Improve Central Korakorum National Park Management System that will be managed by the EV2CNR. EV2CNR is a non-profit association and a collaborator of ECO Science Foundation, which promotes scientific and technological research in mountain areas. In this regard, UNDP hosted a launching and signing ceremony of this project on March 29th, 2017 in Islamabad. Engr. Mr. Khalil Raza, Scientific Officer, participated in the ceremony on behalf of President ECOSF Professor Dr. Manzoor H. Soomro.

Federal Minister for Climate Change, Mr. Zahid Hamid was the Chief Guest of the Ceremony. Other notables included Iqbal Hassan, Minister for Climate Change GB, Mr. Ignacio Artaza (Country Director UNDP), Ms. Della Vedova (Under Secretary International Affairs — Government of Italy. The overall goal of implementing this project is to improve the governance of the critical mountain system of Gilgit-Baltistan to address the emerging threats of climate change to the ecology and people of central Korakoram National Park Management System under the framework of Pakistan-Italian debt for development SWAP agreement. In his opening



remarks, Federal Minister for Climate Change, Mr. Zahid Hamid said that reclamation and protection of wildlife and ecosystem of the Korakoram National Park is critical to the development of Pakistan. The adverse impacts of climate change are of immense concern for Pakistan and they impede our ability to promote sustainable development. Therefore, there is a need for effective adaptation and mitigation measures in Pakistan, he added. He appreciated the assistance being provided to government of Pakistan by the UNDP and Government of Italy.

Read More: <a href="http://eco4science.org/Mountain-Protected-Areas">http://eco4science.org/Mountain-Protected-Areas</a>

#### National workshop on Pakistan's Achievement of Water Related SDGs at PCRWR

A national workshop on Pakistan's Achievement of Water Related SDGs was held at the Pakistan Council of Research in Water Resources (PCRWR) Headquarter on March 14-15 in Islamabad. The workshop was jointly organized by the United Nations University, Institute for Water Environment and Health (UNU-INWEH), Canada and Water Resources Section, Ministry of Planning Development and Reforms. The national workshop was attended by researchers and scientists, water sector experts, policy makers and civil society representatives. Professor Dr. Manzoor H. Soomro, President ECO Science Foundation along with Engr. Mr. Khalil Raza participated in the workshop.

Federal Minister for Science and Technology, Mr. Rana Tanveer Hussain was the Chief Guest of the event. He importance of water, as it is critical to the development of the country and ensuring food security. He further stressed for making collaborative effort and appropriate planning to formulate a policy to address the water related issues and achieve Sustainable Development Goals by 2030.

The event included the presentations by various key stakeholders, breakout sessions and discussion on key policy issues such as the capacity building, access to clean water, financing, and disaster risk management. Dr. Manzoor Qadir from UNU-INWEH, Canada briefed participants about a two-year project "Water in the World We Want – water related SDG Framework for National Action. This project focuses on the adoption of water related SDGs in planning and policy process at national level for Pakistan.



Read More: <a href="http://eco4science.org/Workshop-PCRWR">http://eco4science.org/Workshop-PCRWR</a>

## ECOFS Supported 2nd Invention to Innovation Summit held at Quetta from 25-26 April 2017



Annual two day "Invention to Innovation Summit" was jointly organized by the University of Balochistan (UoB), Institute for Research Promotion (IRP) with collaboration with numerous institutions including ECOSF from 25-26 August 2017 at Quetta, Balochistan-Pakistan. This was the 2- summit hosted by UoB at Quetta. ECOSF along with other institutes and organizations of Pakistan supports the annual summits organized in four provinces of Pakistan annually. The summit was opened by H.E. Mr. Muhammad Khan Achakzai, Governor of Balochistan province. In his speech, the Governor appreciated the organizers to organize "such a wonderful event in University of Balochistan which rarely get chance to host such kind of events".

The summit highlighted the importance of local technologies for knowledge economy of Pakistan and provided an opportunity for linkages and technology transfer between academia, industry and

government. The objectives of the summit were to promote, disseminate, expand and advance the viable research technologies. The features of the summit were Presentation of Viable Technologies through Technical Sessions; Exhibition of Academic & Industrial Innovative Products/Models; Exhibition of innovative product/technology/idea by university students; Workshops on Research Commercialization; Business Plan Competition and Annual Innovation Awards. ECOSF was represented by its Assistant Director, Mr. Ghulam Abbas in the summit.

Read More: <a href="http://eco4science.org/Invention-to-Innovation-Summit-Quetta">http://eco4science.org/Invention-to-Innovation-Summit-Quetta</a>

## 5<sup>th</sup> IPBES Plenary held in Bonn-Germany

The fifth session of the IPBES Plenary was held from 7-10 March 2017 in Bonn-Germany. The session was attended by more than 600 Government expert and development delegates including President ECOSF Prof. Dr. Manzoor Hussain Soomro. ECOSF is an accredited Observer/Stakeholder of IPBES, indirectly contributing to IPBES deliverables and targets.

The session was opened by the Chair of IPBES and former Chair of the IPCCC Sir Robert Watson. In his remarks he said, "Successful climate action can never be at the expense of biodiversity, because stabilizing the climate is only possible over the long-term by ensuring the health and protection of biodiversity and ecosystems. This is why the scope of the four regional and the global IPBES assessments — all currently underway — include the relationships between biodiversity, ecosystem services and climate change". Earlier, welcoming remarks were made by Ms. Anne Larigauderie, Executive Secretary of the Platform Secretariat.



Read More: <a href="http://eco4science.org/5th-IPBES-Plenary">http://eco4science.org/5th-IPBES-Plenary</a>

### ECOSF follows up with PITE Quetta for Implementation of IBSE in Schools of Balochistan- Pakistan

Assistant Director (Admin & Programmes) ECOSF Mr. Ghulam Abbas visited Provincial Institute of Teachers Education (PITE) Quetta, Balochistan province of Pakistan on 25 April 2017 as a follow up on IBSE activities.

It is pertinent to mention that ECOSF and PSF in collaboration with LAMAP France had organized a Capacity Building Workshop on IBSE last year from 5-9 September 2016 in Islamabad and five participants from Balochistan were trained in that workshop. Thus, the main purpose of the visit was to meet those trainers and review the progress made by them on IBSE implementation in their centres. During the meeting, Mr. Abbas in his presentation briefed on ECOSF aims and objectives with special reference to IBSE.



25 participants including two Deputy Directors (Admin and Training) and senior trainers of PITE attended the meeting. The participants of the meeting appreciated the work of the Foundation in promotion of Science, Technology and Innovation (STI) in ECO region and showed keen interest in the programmes of the Foundation.

The Deputy Director (Training) Mr. Tariq Hassan thanked ECOSF for visiting the PITE and sharing the fruitful information with his colleagues. He requested that full workshop on IBSE may be conducted in PITE for training of more teachers of the centre. Mr. Abbas suggested the participants to be more active on social media for a faster approach from the prevailing communication systems to get more benefits from the programmes of the Foundation and other national and international organizations who share their all programmes on the websites and social media.

Read More: http://eco4science.org/PITE-Quetta

# ECOSF contributes to an international book on "Science Education at Schools" published by Springer

President ECOSF Dr. Manzoor Hussain Soomro and former Scientific Officer of ECOSF Dr. Saima Huma Tanveer contributed in a Chapter titled "Ethics and Education in Pakistan: Principles, Policies and Practice" in the book titled: "Children and Sustainable Development" edited by Antonio M. Battro. Pierre lena, Marcelo Sanchez Sorondo and Joachim von Braun and published by Springer, Germany (ISBN: 978-3-319 -47129-7). Their book is a collection of articles by various experts and science educationist around the globe including Professor Jeffery Sachs of Columbia University, USA who is also the Advisor to UN Secretary General on Sustainable Development.

Read More: <a href="http://eco4science.org/ECOSF-continues-to-strive-for-promotion-of-science-education">http://eco4science.org/ECOSF-continues-to-strive-for-promotion-of-science-education</a>

Antonio M. Battro · Pierre Léna
Marcelo Sánchez Sorondo
Joachim von Braun Editors

Children and
Sustainable
Development

Ecological Education in
a Globalized World

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#### **IPBES Guide**

The new Intergovernmental Science Policy Platform on Biodiversity and Ecosystem Services (IPBES) Guide, produced in collaboration of the Network-Forum for Biodiversity Research, Germany (NeFo, <a href="http://biodiversity.de/">http://biodiversity.de/</a>) and the GIZ project ValuES (<a href="http://www.aboutvalues.net/">http://www.aboutvalues.net/</a>) has been prepared and is now available.

Read More: http://eco4science.org/IPBES-Guide

#### 21<sup>st</sup> – Century skills every student needs!

The gap between the skills people learn and the skills people need is becoming more obvious, as traditional learning falls short of equipping students with the knowledge they need to thrive, according to the World Economic Forum report "New Vision for Education: Fostering Social and Emotional Learning Through Technology".

Today's job candidates must be able to collaborate, communicate and solve problems – skills developed mainly through social and emotional learning (SEL). Combined with traditional skills, this social and emotional proficiency will equip students to succeed in the evolving digital economy.

## **ECOSF Team visits Leech Farm of University of Tehran**

ECOSF team comprising Prof. Dr. Manzoor H. Soomro, President ECOSF and Engr. Khalil Raza, Scientific Officer visited the Leech Farm of the University of Tehran, Iran on April 28th, 2017. Prof. Soomro appreciated the opportunity extended by Prof. Masoumeh Malek, Professor of Zoology and Prof. Alireza Sari, Professor of Marine Biology at the University of Tehran for taking their time out to make this visit possible. Prof. Malek explained that medicinal leech has been in use and received considerable attention in various fields throughout the history of human activity. Prof. Malek informed that Leech therapy is used for plastic and reconstructive surgery, migraine, problems with veins, eczema, depression, reducing high blood pressure, stroke, arthritis, rheumatoid diseases and gout. Some leech therapists consider it as a natural botox. As a matter of fact, the Food and Drug Administration (FDA) of USA approved leeches as a medical device in 2004, she added.

Moreover, they can also be used for producing natural pharmaceutical products.

Read More: http://eco4science.org/Leech-Farm

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## NASA Space Apps Challenge 2017- Pakistani Youth join in the Hackathon

National University of Science and Technology (NUST) in collaboration with Team Rahe Qamar and Sim Dyna hosted a NASA Space Apps Challenge 2017 in Islamabad on April 29th and 30th, 2017. President ECOSF Prof. Dr. Manzoor H. Soomro was invited as a judge of the projects at the Space Apps Challenge; however, he nominated Engr. Khalil Raza, Scientific Officer ECOSF for the judgment. NASA Space Apps Challenge is an international hackathon that occurs over 48 hours in 200 cities around the world. Coders, scientists, designers, technologists, and everyone enthusiastic about space came together to address challenges being faced on Earth and in space. Over 13 different projects/teams participated in the event from all across Pakistan.



Prof. Dr. Manzoor H. Soomro during his keynote motivational

speech emphasized on the role of youth in the national development and he encouraged all young participants to fully utilize this global platform to show the world that Pakistani youth has the spark and energy to contribute towards resolving global challenges. Prof. Soomro stressed that young students, scientists and engineers are the most resourceful assets for any nation, and it is our responsibility to provide them the right opportunities to excel in this fast changing world. Prof. Soomro introduced to the participants, the flagship programs of ECO Science Foundation, including the Appldear2R (appidea2r.com). He encouraged all the participants to register their ideas for this Appldea2R program that aims to utilize the ICT platform and engage youth to address the challenges and achieve the UN Sustainable Development Goals (SDGs). The top two winning participating teams will have the chance to present their projects at the global forum that will be held in New York, USA.

#### President, ECOSF offers condolences for deadly Kyrgyz landslide

Kyrgyz Republic suffers loss of precious lives due to landslide on 29 April. ECOSF stands with the people and Government of Kyrgyz Republic in this moment of grief.

President ECOSF visited the Kyrgyz Embassy, condoled with officials and signed the book of condolences opened on 30 April in the Embassy. The Kyrgyz flag remained half-mast on the day.



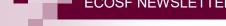
# 2<sup>nd</sup> International Conference on "The Role of Young Scientists in the development of sciences, Innovations and technologies" to be held on 11-12 May, 2017 in Dushanbe

2<sup>nd</sup> International Conference on "The Role of Young Scientists in the development of sciences, Innovations and technologies" jointly organized by ECO Science Foundation, International Science and Technology Center and Council of Young Scientists under the Academy of Sciences of Tajikistan to be held from 11-12 May, 2017 in Dushanbe.

http://eco4science.org/Role-of-Young-Scientists

2nd International Conference on "The Role of Young Scientists in the development of sciences, innovations and technologies" to be held on 11-12 May, 2017 in Dushanbe.





#### International Conference/Workshop on Nanotechnology and Nanomedicine, 2-3 May 2017

International Conference/Workshop on Nanotechnology and Nanomedicine, being organized by Inter-Islamic Network on Nanotechnology (INN) and supported by ECO Science Foundation at Materials and Energy Research Center (MERC), Alborz, I.R. Iran, from 2-3 May 2017

http://eco4science.org/Nanomedicine-1



## Upcoming Events posted on ECOSF website and facebook page

### 11th IEEE International Conference on Application of Information and Communication Technologies

The AICT2017 IEEE International Conference is a forum to bring together business people, researchers, scientists, software architects, and industry professionals to discuss innovative ideas and diverse topics on next generation of information technologies and services. Using this forum, researchers and practitioners can exchange issues and challenges, new business models and structures, new technologies and solutions. Researchers, practitioners and distinguished speakers are invited to submit a paper and/or to make proposals of original research speeches addressing business and technical issues, challenges, technologies, complete solutions and ICT-based services. All papers/proposals will be peer-reviewed by the members of the international Program Committee.

Web Link: http://eco4science.org/11th-IEEE-Int-Conf

#### **TWAS-Lenovo Science Prize**

The TWAS-Lenovo Science Prize is one of the most prestigious honours given to scientists from the developing world. In 2017 the prize will be given for outstanding achievements in Geological Sciences. The winner receives USD100,000.

Web Link: http://eco4science.org/TWAS-Lenovo-1

#### **TWAS-COMSTECH joint Research Grants**

Under this scheme grants are awarded to promising high-level research projects in earth sciences, engineering sciences, information technology and computer sciences, materials science including nanotechnology, pharmaceutical sciences and renewable energy carried out by young individual scientists in OIC countries.

http://eco4science.org/TWAS-COMSTECH Web Link:

## **CALL FOR PAPERS - Global Conference on Wireless and Optical Communications**

GCWOC'17 is an International forum for researchers to exchange information regarding novel aspects of technology, application and service development within the multidisciplinary framework of Wireless and Optical Communication Technologies.GC-WOC'17 is being jointly organized by University of Malaga (UMA, Spain), Mehran University of Engineering & Technology (MUET, Pakistan), and Sir Syed University of Engineering & Technology (SSUET, Pakistan), with technical cooperation from Erasmus Mundus LEADERS program.

Web Link: http://eco4science.org/GCWOC-17